

# COMPLETE PLANTING HANDBOOK

## Giving Your Plants A Good Start

Dear Fellow Gardener,

We would like to thank you for placing this order with us, and hope that you fully enjoy your gardening experience. We are aware that you have many gardening choices today and are pleased you are putting your trust and confidence in our company. We strive to offer the very best the fields have to offer each and every year!

Please take a few moments to read over the important information we have included. These pages are a valuable resource in helping to start your plants in the right direction.

The information within this planting guide should answer most, if not all, questions you may have about your order and how to care for your plants.

Pay particular attention to the first section, "When Your Order Arrives" and our guarantee. These are your important first steps in achieving success.

We wish you many fun-filled hours spent enjoying your gardens and thank you again for allowing us the opportunity to share this experience with you.

Happy and Successful Gardening!!



### PLEASE READ \*\*IMPORTANT\*\* PLEASE READ

Order with complete confidence. We select and ship only the finest quality bulbs and perennials. We pack them carefully to ensure that they arrive safely. If you are not pleased with your purchase, please call us at (309) 662-7761 or email us at [customercare@eburgess.com](mailto:customercare@eburgess.com) and our Customer Service representatives will be happy to help you obtain a merchandise credit. Your order is important to us, and we want you, our customer, to be completely satisfied.

### When Your Order Arrives. . . .

**KEEP THE SHIPPING LABEL** - The shipping label is your proof of purchase and is needed for your warranty. Keep this label in a safe location for the year your plants are under warranty. For complete warranty instructions, see the upper right of this page.

**INSPECT YOUR ORDER** - Make sure all the items listed on the shipping label, located on the outside of the package, are enclosed. Then check all the plants; if you discover some broken branches or roots simply prune them off. This will not hurt your plants.

**REMEMBER YOUR PLANTS ARE LIKELY DORMANT AND NOT DEAD** - The majority of the plants we send are in a dormant state in which they dry up and look dead. Many of the plants are also bare root meaning there will not be dirt surrounding the roots, nor will they be in pots.

Dormancy is the state that a plant/tree/shrub goes into during the winter in cold climates and is the safest way to transport live plants. We keep our bare root items in climate-controlled coolers to keep them in this dormant state until they are packaged for shipping. Some plants may look droopy on arrival. Give them a chance. Plant as directed and water regularly and the plants will almost certainly revive.

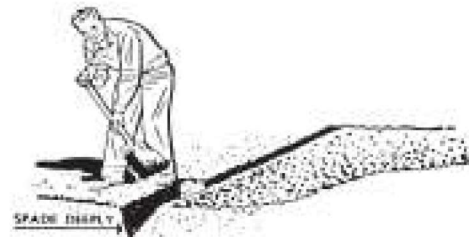
**PLANT AS SOON AS POSSIBLE** - For best results, plant right away. Thaw out gradually in packing if plants arrive frozen. If woody plants dry out during transit, soak them in water for 2-24 hours. Non-woody bare root plants should NOT be soaked. When immediate planting is not possible, store bulbs and perennials in a cool, dry, dark place such as an unheated garage or basement. Perennials should have their roots lightly moistened. Heel in trees and shrubs (see below). These measures are all temporary and proper planting should be done as soon as possible.

**WATER, MULCH AND CULTIVATE** - Proper care of your new plants is very important. New plants can be very tender and require additional care until they are established. View the section, "After You Plant" on page 4 for more specific details and make sure your plants receive adequate water.

**BE PATIENT AND ENJOY!** - Your gardening adventure is just beginning. Allow your plants 6 weeks to become acclimated to their surroundings and begin to thrive before implementing your warranty. Take proper care and sit back and enjoy your new plants!

### Preparing the Ground for Planting

The soil where you will be planting should be loose and of good quality. Dig the hole and work in some Peat Moss, manure, humus, or leaf-mold with the existing soil. This will add organic matter. If your soil contains high amounts of sand or clay, you will want to add some good black topsoil in addition to the organic matter. A good rule of thumb is 1/3 original soil, 1/3 organic matter and 1/3 topsoil, if the original soil is not of good quality.



SPADE DEEPLY - Dig your grounds for maximum enjoyment.

To ensure adequate room make the hole 2 times the width and depth of the root system you are working with. Potted plants should have 6 to 8" of space around them. When holes are dug in sod for trees or shrubs, work up 2 or 3' around the plant and keep this cultivated or mulched for good plant growth. The 7-8" of soil at the bottom of the hole should be loose so the roots have plenty of good soft soil to take hold in. Planting depth should be at the same level as they were grown in the nursery. Look for the old soil line on the plant. You would want the hole to be deep enough to keep the original soil line. If you are not able to see the soil line, or you are dealing with non-woody plants, the top of the root system should be just below the soil surface (this information is general; some plants may require more specific depths). **DO NOT FERTILIZE NEWLY SET MATERIAL.**

### Heeling In Trees and Shrubs

If you cannot plant nursery stock soon after it is received, it is best to "heel" it in someplace where it will have protection from the sun and wind. This temporary planting will help retard development. Remove all packing material and grass that might harbor mice or insects. Spread out the roots as you would in a permanent planting situation and fill in with pulverized earth and set firmly. Be sure to keep the earth moist until you are ready to plant permanently.



## Spring-Summer and Fall Planting

### SPRING-SUMMER PLANTING

**SPRING SHIPPING** begins in March to the warmest climates and progresses North as the weather warms. Until April we only ship dormant plants, then we begin shipping potted items and tender perennials as the weather warms up.

The plants we ship, other than the potted items, throughout the spring and summer are sent dormant. They can be planted even if your area is still at risk for frost. Potted items should NOT be planted until there is no longer a risk for frost.

**IF THE GROUND IS STILL FROZEN** when your plants arrive, open the package and place them in a cool (preferably dark) location, such as an unheated garage or basement. Keep the rootstock moist, but not wet by misting them with a spray bottle. This will protect them from the elements, but will keep them cool enough to remain dormant until you get the chance to plant.

**IF YOU THINK IT IS TOO HOT** when your plants arrive, plant them anyway. Some people think if their order arrives late in the spring or into the summer when the temperatures are already hot that it is too late to plant. This is incorrect. When dealing with bare root, dormant plants they can be planted in the heat of the summer. It is important to simply provide enough water to the newly set material. Do not allow newly set plants and trees to dry out after planting. Likewise, spring-blooming bulbs can be planted as usual, even if it's hot outside.

**DO NOT FERTILIZE** any bare root items until the second year, which is when the feeding roots will be established. In addition, bare root items are too sensitive to be fertilized the first year. Fertilizing too soon could actually cause harm to the root system and possibly kill the plant. If you want to use something the first year, root stimulator could be used.

### FALL PLANTING

**FALL SHIPPING** begins in August and goes through (at least) the end of October, depending on the weather. The items we ship in the fall are dormant and can be planted until the ground is frozen. Unless you cannot physically dig a hole in the ground, the item can be planted. ALL plant material shipped in the fall can be planted as long as you can dig the hole no matter how cold it is outside.

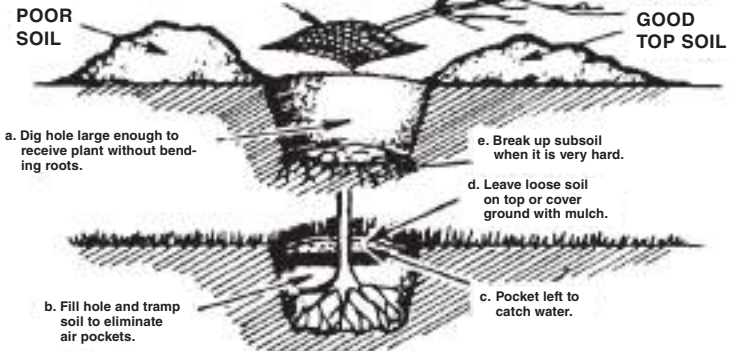
They will not, however, come out of dormancy within 6 weeks as they would if planted in the spring or summer. Instead, wait until your other plants begin to leaf the next spring. If at that time, the items you planted in the fall do not leaf out, they may not have survived. In this event, send your shipping label for a replacement, (see the guarantee on front cover).

**WINTER STORAGE** - If you do not wish to plant items which arrive late in the season, you may store them for the winter. Store BULBS in a frost-free refrigerator. Remove them from the plastic bags, put them in a container covered in sawdust, sphagnum moss or finely shredded newspapers, then place in the refrigerator. Do not store near fruit and do not allow to freeze. Plant outdoors as soon as the ground is workable in early spring. For other PERENNIALS, store them in the refrigerator the way they come from us. If mold develops simply remove them from their wrappers, wipe away the mold, place them in newspaper or other toweling and return to the refrigerator. Plant as soon as the ground can be worked.

## Planting Bare Root Trees and Shrubs

After preparing the planting site as instructed in the section "Preparing the Ground for Planting;" on page 1, remove whatever packing material was used from around the plant. Prune any broken or damaged roots. Spread the root system, of the tree or shrub, naturally and work soil over and around the roots. Set trees one or two inches deeper than they stood in the nursery and set shrubs at about the same depth they stood in the nursery or slightly deeper. Look for the dark soil ring around the trunk. Keep putting in the good dirt mixture, slightly compacting it firmly around the roots, until the hole is nearly full. Fill the hole with water and once the water has soaked into the ground, complete filling the hole with loose dirt leaving a saucer-like depression to retain water. It is best to cover the area with 2" of mulch. **DO NOT FERTILIZE** until the second year when feeding roots have been established. Fertilizing before can damage tender young roots.

### ALWAYS KEEP ROOTS COVERED



Water two or three times per week throughout the first year, except in the winter when watering should only be done when the ground is thawed. (This is a guideline, depending on the weather in your area; you may need to water more or less often).

Most shrubs should be thinned out at the top to remove old wood. Cut tops back about 1/3 to 1/2.

### TREE HYDRANGEA AND TREE ROSE OF SHARON

Strong growing plants such as Hydrangea (Hydrangea P.G.) and Rose of Sharon (Hibiscus Syriacus) may be grown in tree form. Generally, it is best to remove all canes except for the strongest. Then place a stake beside the plant and securely tie the branch to the stake. Keep all side branches cut off and continue to tie the trunk to the stake as it grows. When the trunk has reached the desired height allow several lateral branches to develop. Prune these as necessary to keep the tree from becoming top heavy. The stake may be removed after the trunk is strong enough to support the top. **Rose of Sharon**-sun to part shade, grows to 15' tall. **Hydrangea**-part shade, grows up to 12' tall. Tree Hydrangea will grow as a multi-stemmed shrub or it can be trained into the form of a small tree. Pruning is needed to achieve the tree form. The plant we ship has had the strongest stem chosen and has begun training as a tree. Continue to favor the strongest stem and prune off all of the other stems at the base of the plant. Allow the main trunk to grow and form a tree. This training may need to be done for a few years.

### TREE PEONIES

In the Orient, Tree Peonies are called "King of the Flowers." Unlike ordinary Peonies, Tree Peonies do not die back to the ground each year but form a woody deciduous shrub that will grow 4-5' tall. They should be planted with the graft at the ground surface. The graft is at the top of the fleshy root. Plant in a protected area, in full sun to partial shade, and in good garden soil. Although Tree Peonies prefer a well-drained location, they should be watered well all season. They should be mulched well the first winter after planting.

### AZALEAS, HOLLY, AND RHODODENDRONS

These are plants that grow best in acidic soil (pH factor 4.2 to 5.2). This can be obtained by adding partially-decayed oak leaves and acid peat or Ferrous Sulfate. Plant in a moist, well-drained, light soil with a high proportion of humus. These plants are shallow-rooted and should never be cultivated. Plant them high and maintain at least a 3" mulch around them.

### TREES, SHRUBS, and HEDGES

DESCRIPTION	LIGHT	HEIGHT	SPACING
Almond	Sun	15-25'	20'
Almond, Pink Flowering	Sun/Pt Shade	3-5'	3-4'
Arborvitae, Golden Globe	Sun	3-4'	3'
Ash, American Mountain	Sun	20-25'	10-15'
Aspen, Quaking	Sun	40-50'	20-30'
Azalea	Pt Sun/Pt Shade	4-6'	4-6'
Banana, Basjoo	Sun	12-18'	12-15'
Banana, Double	Sun	5-7'	5-7'
Beech	Sun/Pt Shade	50-65'	35-50'
Ben Franklin Tree	Sun/Pt Shade	25'	25-35'
Birch	Sun	50-60'	Clumps of 3, 35' apart
Burning Bush, Dwarf	Sun to Shade	4-5'	2-4'
Butterfly Bush	Sun	3-8'	3-6'
Butternut	Sun	40-60'	40-50'
Buttonbush	Sun/Pt Shade	6-10'	5-8'
Cedar, Himalayan	Sun	40-50'	30-40'
Cherry, Royal Japanese	Sun/Pt Shade	15-25'	15-20'
Cherry, Sugar Sweet	Sun	10'	6'
Cherry, Weeping/Flowering	Sun	20-30'	15-25'
Chestnut	Sun	15' hedge 40' tree	8' hedge 40' tree
Clematis Shrub	Sun/Pt Shade	24-30"	24-30"
Coralberry, Indian Currant	Sun/Pt Shade	3'	2-3'
Crab, 3 N 1 Flowering	Sun	15-20'	15-20'
Crabapple, Dolgo Dessert	Sun	30'	25'
Currant	Sun/Pt Shade	3-7'	3-5'
Cypress, Leyland	Sun	60-70'	6'
Dogwood, Pink	Sun/Pt Shade	20-30'	15-25'
Dogwood, Red Twig	Sun	6'	3-5'
Elm, Princeton American	Sun/Pt Shade	80-100'	20-50'
Elm, Siberian	Sun/Pt Shade	45'	3-6' for hedge
Fir, Douglas	Sun/Pt Shade	40-60'	12-20'
Fir, Korean	Sun	20-30'	15-20'
Firethorn	Sun/Pt Shade	10'	3-4' for hedge
Forsythia	Sun	9-11'	1'
Fossil Tree	Sun/Pt Shade	40-50'	50'
Golden Chain Tree	Sun/Pt Shade	10-20'	10-15'
Hazelnut (Filbert)	Sun	12-15'	6-15'
Heather, Firefly	Sun	18-24'	18-24'
Heartnut	Sun	25-30'	20-25'

TREES, SHRUBS, and HEDGES			
DESCRIPTION	LIGHT	HEIGHT	SPACING
Hemlock, Canadian	Sun/Pt Shade	20-35' hedge 20-70' tree	2-3' hedge 25-30' tree
Hickory, Mammoth	Sun	60-80'	40-50'
Holly	Sun/Pt Shade	6-8'	2-4' for hedge
Honeysuckle	Sun/Pt Shade	8-10'	30-36"
Hydrangea	Shade/Pt Shade	3-6'	3-6'
Juniper, Groundcover	Sun/Pt Shade	4-6"	3'
Juniper, Pencil Point / Skyrocket	Sun/Pt Shade	6' / 15'	1' / 2-3'
Lilac, Japanese Tree	Sun	20-30'	20'
Lilac, Josee	Sun/Pt Shade	4-6'	4-5'
Lilac	Sun	8-15'	6-12'
Lilac, Persian	Sun/Pt Shade	5-8'	4'
Lily of the Valley Tree	Sun/Pt Shade	25-40'	15-20'
Magnolia	Sun	15-50'	15-20'
Maple, Autumn Blaze	Sun	50'	40'
Maple, Crimson King	Sun	30-40'	30-40'
Maple, Ginnala	Sun	15-20'	15-20'
Maple, Scarlet Red	Sun	35-50'	15-20'
Maple, Sugar	Sun	75'	60'
Mock Orange	Sun/Pt Shade	8-10'	8-10'
Mulberry, Red	Sun/Pt Shade	45'	10' for hedge
Ninebark, Diablo	Sun/Pt Shade	4-8'	4-8'
Oak, Red	Sun	35-50'	20-30'
Olive, Hardy	Sun/Pt Shade	20'	12'
Olive, Russian	Sun	15-20'	8'
Palm, Hardy Windmill	Sun	10-20'	6-10'
Paw Paw Tree	Sun/Pt Shade	15-20'	15-20'
Pecan	Sun	40-75'	30-40'
Pine, Austrian	Sun/Pt Shade	60'	8-12'
Pine, Scotch	Sun/Pt Shade	30-60'	16-20'
Pine, White	Sun/Pt Shade	50-80'	15-25'
Plum Hedge, Purple Leaf	Sun/Pt Shade	6-8'	2-3'
Poplar, Hybrid	Sun	50-60'	10' screen, 35' shade
Poplar, Lombardy	Sun	30-50'	5-6'
Privet Hedge	Sun/Pt Shade	10-15'	1-2'
Quince	Sun/Pt Shade	6-10'	2-4'
Red Birds in a Tree	Sun	36"	18"
Red Bud Tree	Sun/Pt Shade	15-25'	15-25'
Redwood, Dawn	Sun	70-90'	25'
Rhododendron	Part Shade	3-6'	3-6'
Rose, Robin Hood	Sun	6'	15"
Rose of Sharon, Hedge	Sun/Pt Shade	5-10'	5'
Sassafras	Sun	30-60'	25-40'
Silk Tree, Hardy	Sun	20-35'	20-40'
Smoke Tree	Sun	10-15'	8-14'
Snowball Bush	Sun/Pt Shade	8-10'	8-10'
Snowbell Tree	Sun/Pt Shade	15'	15'
Spirea, Bridal White	Sun	6'	2' hedge; 6' single
Spruce, Blue	Sun	50'	10' hedge 18-20' single
Spruce, Norway	Sun/Pt Shade	40-60'	15-20'
Sweetbox, Fragrant	Shade	2-3'	3-4'
Sweetspire, Ruby	Sun/Pt Shade	4-6'	4-6'
Thuja, Green Giant	Sun/Pt Shade	60'	5-12'
Tulip Tree	Sun	80-100'	30-50'
Tupelo, Black	Sun/Pt Shade	20-30'	25-40'
Walnut, Black	Sun	40-75'	40-50'
Walnut, English	Sun	40-60'	25'

TREES, SHRUBS, and HEDGES			
DESCRIPTION	LIGHT	HEIGHT	SPACING
Weigela	Sun/Pt Shade	4-8'	4-6'
Willow, Hybrid	Sun	35-75'	3-5'
Willow, Pussy	Sun/Pt Shade	8-10'	4-6'
Willow, Weeping	Sun	40-50'	30'
Winterberry	Sun/Pt Shade	8'	3-6'
Wisteria Tree	Pt Shade/Pt Sun	8-10'	10-15'
Witchhazel	Sun/Pt Shade	10-15'	10-15'

## Evergreens and Hedges

**EVERGREENS** – After preparing the planting site as instructed in the section “Preparing the Ground for Planting,” page 1, trim off any injured roots. Set the evergreen about 1” deeper than they had been planted at the nursery. Evergreens are not hard to grow but there are some factors to be considered to help prevent evergreen failure.

**WATER** – During the first year, evergreens should never be allowed to dry out. Water them 2-3 times per week with long, slow soakings that thoroughly saturate the soil around the roots.

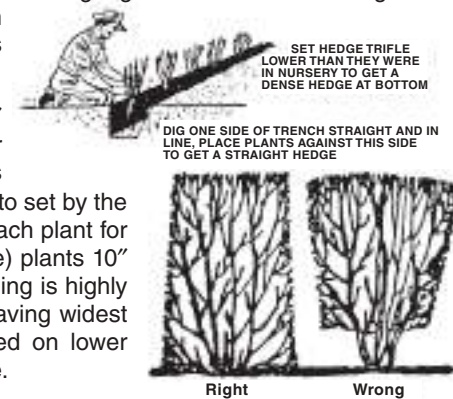
**SOIL CONDITIONS** – Most soil around the house comes from basement diggings, which will not support plant life. Be sure to work up the soil with organic matter and use a well-balanced fertilizer, after the first year.

**SUN** – Most evergreens are grown in open fields for their first few years. When they are transplanted near a house where they are in shade for several hours each day, the resulting change may be harmful. It may be necessary to use a good balanced fertilizer (after the first year) to supplement the changed environment.

**PETS** – Perhaps the most common cause of evergreen failure is injury caused by pets. Damage from pets can kill evergreens in a matter of days.

**NARROW-LEAVED EVERGREENS** – These may be kept thick and shapely and their growth restricted to suit your purpose by pinching back a part of the tender, new growth. Cut back evergreen hedges whenever the growth is becoming irregular and out of shape.

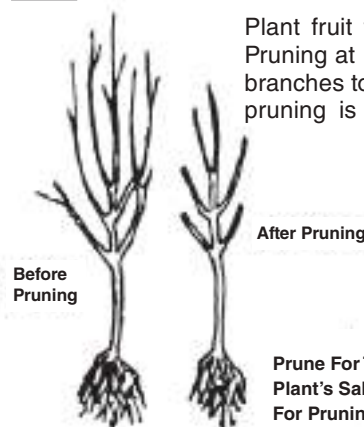
**BROAD-LEAVED EVERGREENS** – Pruning tips of branches before new growth starts will help to keep shrubbery thick. If necessary, head back longer growth. Removal of fading flower clusters will prevent seeds from forming on Laurels, Rhododendrons and Andromedas. This is usually all the pruning that's necessary.



**HEDGES** – For single row, dig a trench 18” to 2’ deep or more, depending on size of plants. For larger shrubs, such as the Russian Olive, it is often more practical to dig individual holes than to set by the trench method. Allow plenty of room between each plant for future development. Space smaller (mature size) plants 10” to 12” apart, larger plants 2’ to 3’. The first pruning is highly important. Be sure to taper sides toward top leaving widest part at bottom. Thus, adequate light is assured on lower branches to make good uniform foliage possible.

## Fruit Trees

Plant fruit trees where they will have plenty of sunshine and air. Pruning at planting time consists only of cutting back a few of the branches to balance the roots and top of trees. Light, annual, spring pruning is preferable to heavy cutting every few years. Remove crossed or injured limbs and any branches that rub against each other leaving desired limbs. Try not to cut sharp angle crotches where branches join the trunk, as these might split with large amounts of fruit as the tree matures. Pruning should open up trees so sunlight can color the fruit and give free circulation of air. Rabbits and other small animals can cause substantial damage to young fruit trees during the winter months. Until the 4<sup>th</sup> year, the lower 18-24” of the trunk should have a protective barrier installed for the winter.



Regular spraying stops insects before they can damage your crop. Apply dormant oil before buds begin to swell. Spray trees with liquid fruit tree spray after flower petals fall. Follow-up applications should be made at approximately 10 day intervals until the harvest nears.

To increase productivity, thinning the crop will be necessary. This will give you much higher quality and larger fruit. For apples and pears, remove one fruit per cluster. For peaches,

nectarines, plums and apricots, leave only one fruit per 8-10" of limb space. Thin crop when tiny fruits become visible.

Plant standard apple and cherry trees 30'-40' apart; apricot, pears, plums and peaches about 20' apart following the instructions in the section "Preparing the Ground for Planting" on page 1. Plant dwarf apples, pears, plums and apricots 10' apart.

## After You Plant Tips

**CULTIVATE** – Control weeds with frequent, shallow cultivation. This will produce dust mulch that conserves the much-needed moisture in the soil. It also eliminates weeds that compete for moisture.

**MULCH** – A mulch of peat, grass clippings, manure with straw, marsh hay, or compost may be used instead of a dust mulch for ornamental trees, shrubs and evergreens. Wood chips, of some sort, are usually favorable for perennial plantings as they are more attractive. Mulch will help keep the weeds down and the moisture in, which is greatly needed with new plantings.

**WATER** – Give plants all the water the soil can absorb at one time. Evergreens, especially, need to be given ample water in late fall before freezing begins. It is important to give plenty of water during dry spells. This will be necessary the first several years for trees. Watering perennials the first year is especially important as well. Do not allow the ground to dry out, but do not let it get soggy unless the plant can tolerate being placed in water (see the perennial chart starting on page 6). Keeping the plants well watered will aid in their root development and help the plant get established before winter. After the first year and the plants are well established, many perennials can even tolerate dry periods. Nature's rainfall should be enough water unless there are prolonged dry spells.

**FERTILIZE** – Trees should be fertilized regularly **after the first year**. Use one-quarter of a pound of commercial nitrate fertilizer per year of growth. This can be broadcast under the spread of the branches in the spring. Perennials can also be fertilized **after** they are established, typically the second year. Fertilizing too soon can damage tender root systems. Be patient and wait to fertilize.

**PRUNE** – The principal purpose of pruning trees and shrubs is to improve the structure. Try to obtain a uniform spacing of the main stems and branches. Thin out the weak growth and eliminate weak crotches. Raise the head of the tree gradually by removing lowest branches; start by carefully pruning the lower branches, about 2 years after you plant. The lower branches should be at least 7 feet above the ground so that you can walk under them. You can keep shrubs shapely and restricted; shrubs should be pruned by removing **only the old wood** to the ground.

Perennials may be pruned to keep them looking their best. Use sharp shears and cut at a 45° angle. Remove dead, damaged, and weak shoots generally during the active growing season, typically spring or after blooming. Plants will be fuller and bloom more profusely. Ground covers will be thicker and flower more when trimmed back about halfway. Don't be afraid to prune! Your plants will love you!

## Small Fruits, Berries and Kiwi

For best results, all fruit plants should be planted in deep, well-drained soil. They should be placed in a location where they will receive full sun and have plenty of room to grow.

### CURRENTS, GOOSEBERRIES & JOSTABERRIES

Do best in cool, moist, partially shaded locations. Set in spring or fall. In the spring, they should be planted before the buds begin to grow. Prune any damaged roots and cut tops back to 10". When planting, the lower branches should be just a little below the soil level to encourage them to develop into bush form. Space Gooseberries 4 to 6' apart; Currants 3 to 4' apart; Jostaberries 4' apart. Fertilize well when you plant, water as necessary and mulch.

### ELDERBERRIES

These prefer moist, well-drained soil and require 2 plants for cross-pollination. The old wood should be pruned to thin out the plant and to prevent crowding.

### RED AND BLACK RASPBERRIES, BLACKBERRIES & LOGANBERRIES

Put roots in a bucket of water while you are preparing the holes for planting. Trim off any broken roots and cut the tops of the plant back to about 6". The hole should be dug large enough to allow you to spread the roots out like a fan; firmly pack the soil around the roots. Plant 3-5' apart in 6' rows. Red Raspberries should be planted 1-2" deeper than they were in the nursery (look for original soil line); Black Raspberries should be 1" deeper. Blackberries should be planted just about as deep as they were at the nursery. The soil should be rich in humus. They should all be planted so that

there is free air movement during the growing season. This lowers the humidity and discourages fungus diseases. Never let the ground dry out. Cultivate early in the season and after the plants are established. Toward midsummer, begin mulching with materials such as grass clippings. This will help to keep the weeds down and conserve moisture. If the bushes are left unpruned, the berries will become a mass of brambles. After fruiting each year, the old canes should be cut out and burnt. A few vigorous new canes should be left for the fruit to grow on the next year. These fruiting canes should be cut back to about 2½' in early spring in order to encourage fruiting laterals.

### BOYSENBERRIES and DEWBERRIES

These can both be trained on either a 4' tall stake or a 2-3' wire trellis. Plant in light, fertile, well drained, moisture holding soil, with peat moss added in full sun. Boysenberries should be planted 8' apart. Dewberries are planted much the same as the Blackberries. This thorn-less, deciduous perennial fruiting vine, known also as a trailing blackberry, is tender and grown mainly in the South. Plant 4' apart in rows 6' apart, one month before last frost. When planting, clip canes to 6" stubs and place at the depth they grew in the nursery. DO NOT plant them where tomatoes, potatoes, or eggplants have grown previously. Young shoots, from the present year's growth, should be kept on the ground and fastened with wire brackets to keep them out of the way. The fruiting canes should be looped over the trellis and cut off after bearing. As the new canes develop, the second year, let them lie on the ground as the first year. After the old canes

have born fruit, cut and burn them to protect plants from anthracnose. Also cut and burn any stubs, which do not sprout. From the new canes, 14-15 canes should then be selected for the next season's crop. The new canes should then be tied to the trellis. Mulch to keep in moisture and reduce weeds. If using straw or sawdust, add extra nitrogen. In colder areas they should be covered with hay. Well-rotted manure, or compost should be used as fertilizer in spring by working it into the soil around each plant, but don't fertilize too heavily or you will have lush plant growth at the expense of fruit.

### BLUEBERRIES

These do best in a cool, moist climate that does not have hot, dry winds. The soil should be moist, light textured and contain a high proportion of organic matter. The optimum acidity level is from pH 4.0 to 4.5. It is beneficial to mix soil with liberal amounts of peat moss and Ferrous Sulfate. Plant in spring or fall, using 2 varieties or more for good pollination. Each year 3-4" of sawdust or peat mulch should be applied. Blueberries have shallow root systems, so a shallow cultivation is required. Prune annually **AFTER** the 4<sup>th</sup> year, cutting back damaged wood to healthy strong growth.

### CRANBERRIES

These low growing evergreen plants are very adaptable, but they prefer a well-drained organic soil and full sun for best results. Since the plants tend to spread and form a groundcover, it is best to allow 24" of spacing.

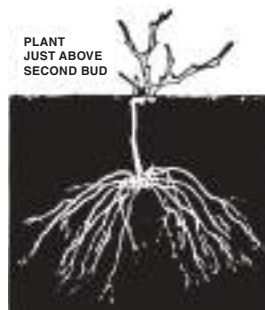
### SERVICEBERRY/JUNEBERRY/SHADBLOW (Amelanchier)

These large shrubs or small trees grow best in a moist organic soil, although they will adapt to dry conditions once established. Plant in full sun to lightly shaded areas to improve blooming and fruit set. They are considered low maintenance plants.

### GRAPES

These should be planted 6' apart in a broad and deep hole. The top should be cut back to 2 or 3 strong buds. They should be planted deep enough to keep the roots from drying out and the hole should be filled with a rich soil or compost. Place the dirt firmly around the roots and water well. They should be kept cultivated through the first season. Once the vines are established they should be mulched with straw, leaves or ground corncobs. A well-decomposed manure is the best fertilizer to use, but do not apply if the vines are making excessive growth because a moderate growth of canes, which mature early, is preferred. Prune annually while dormant (before buds start to swell). The fruit clusters are formed from the buds on 1-year-old canes. Canes that have borne fruit will not bear again so prune those off leaving approximately four new canes on each plant. To prune properly, 80 to 90% of the wood must be removed.

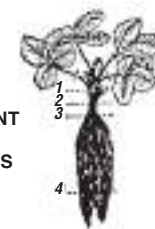
**PLANT JUST ABOVE SECOND BUD AND GROW** on a sturdy trellis or fence giving grapes good air circulation to prevent rot and mildew.



### STRAWBERRIES

Plant in fertile, well cultivated soil. Set the plant with the crown just at the surface of the soil. Be sure roots are spread out fan-shaped and hang down full length without crowding. For the garden, set them at 2 foot intervals. Mulch them with 3 or 4" of straw in the fall. The mulch can be left on the next season to retain moisture and keep down weeds.

1. PLANT SET TOO DEEP
2. SET AT CORRECT DEPTH
3. DO NOT SET PLANT THIS HIGH
4. PRUNE THE ROOTS IN THIS AREA



### RHUBARB

Plant in rich, well limed garden soil in the spring or the fall. Plant rhubarb divisions 3' apart so crown is 1 to 3" below the surface of the soil. Give plenty of moisture, clean cultivation, and feed generously yearly. No stalks should be pulled until the second year and then harvested lightly. The third year and after, they may be pulled over a 6-week period from early spring until early summer. Plants may be dug, divided and moved in either the fall or the spring.

### KIWI

Shipped: 2¼" pot.  
Soil: well-drained  
Light: full sun to partial shade, likes humidity

Plant: 8' apart in rows 10-16' apart

Fruit: late summer  
Fruit Size: ¾" to 1½"  
Zones: 4-10

Time to Bear Fruit: 3-4 years

Mature Plant: Up to 10 gallons/2 vines

This ornamental creeper will quickly cover arbors, fences or trellises. It can be trained to cover an area 8' high by 30' wide, creating an excellent screen. Must have both male and female for cross-pollination. Your male kiwi, which will supply sufficient pollen for 5-7 female plants, should be placed within 200-300' of any female kiwi you wish to bear fruit. Grows like a grape, harvest September-October, must have a dormant period. Insect and disease resistant.

**CARING FOR YOUR KIWI** – When first received, transplant into a larger pot. Keep it inside in a sunny location until plant is stronger, then transplant outside. You'll need to protect your kiwi from the frost in the spring when any new young growth is on the plant, because the crop for that season may be lost. If a late spring frost is in the forecast, cover the plant with burlap or an old sheet. Be sure to provide a support system soon after planting. Kiwi should receive an inch of water a week, either through rainfall or watering. Allowing the soil to dry out in the summer will damage the fruit crop and reduce winter hardiness. The first winter after planting your kiwi apply a very deep (4-6") layer of humus mulch after the soil has frozen.

**PRUNING KIWI** – You must prune in the summer to have the vines fruit. If left unpruned it may take up to six years to flower. To prune, pinch back the canes as they grow from the two main lateral branches (Cordons). In the spring the canes grow quickly to 8" long. Prune these back to about 4". You may need to do this every few days or so. You can stop pruning around mid-summer.

### PAW PAW

Paw Paw's do best in deep, fertile soil that is moist, but well-drained and slightly acidic. Filtered sun is preferred the first year or two, but once established full sun is best. They grow 15-20' tall and wide, occasionally reaching 30-40'. Need 2 for pollinating. Usually fruits in 3 years. May need to hand pollinate. Fruit is ripe when soft and yields easily to a gentle squeeze. Highly nutritious. Fruit will keep for up to 3 weeks if refrigerated.

### FIG TREE

The Fig prefers moist, well drained soils. It is tolerant of a wide variety of soils ranging from mostly sand to some clay, normal to moist with a pH of 5.5 to 8. Plant in full sun. Fruit ripens in June on old wood and often again in August on current year's wood. If winter temperature is colder than -5 degrees, the top will die back but the root will survive. Can be container planted if needed in cold zones.

### CHERRIES

Prefer well drained soil. Will tolerate soils with sandy loam or some clay. pH 4.5 to 7.5. Full sun. 2-3 years to bear fruit. Tolerates dry, hot conditions.

### HONEYBERRY

Hardy to -40°! Produces large crops of elongated blueberry-like fruits 1-2 years after planting. Blue Velvet™ reaches 3-4', while Blue Moon™ grows 2-3' tall. Planting these two varieties will fruit from May-July. Both are required for pollination.

### GOJI BERRY

Can be eaten fresh, dried, or frozen. Leaves can be eaten as a vegetable or used to make teas. Fruits in the fall. Can grow to over 10' but should be cut back to 5' in the fall for better fruit production the following year. Self-fertile and drought resistant. Avoid acidic soil. Plant in full to partial sun.

### MUSCADINE GRAPE

Self-fertile, ripen early, disease resistant with black fruit. Higher antioxidant count than other grapes. Excellent for fresh eating and wine making. Moderate growth rate.

### PERSIMMON

Dioecious tree so needs a male and female for pollination. Best to plant several trees for optimum fruiting within a mile radius. Key to its exquisite flavor is to let fruit completely ripen almost to the point of going bad. Prefers moist, well-drained soil but adapts to a wide range of soils. Plant in full sun but is also shade tolerant. Fruits in September-November.

### TAYBERRY

Cross between a loganberry and a black raspberry. Fruit is sweet, large and aromatic. Makes wonderful jams, pies, wines; delicious eaten fresh. High in vitamin C, bioflavonoids, good source of folate and fiber. Grow like blackberries. Harvest early July to mid-August.

### ARONIA OR CHOKEBERRY

Fruit can be used for juice, wine, jam, syrup, soft spreads and tea. High in Vitamin C and antioxidants. Grows 3-8' tall. Yields 10+ pounds of berries. Begins bearing 2nd year. Plant in sun. Hardy to -40°. Will tolerate: swampy ground, dry sandy soil, drought, salt, and pollution. Insect and disease tolerant.

### Cactus - Christmas, Easter, Twilight

**Tangerine** - Holiday Cactus like a rich soil that is kept evenly moist. Fertilize every two weeks from spring through August. These cacti are photoperiodic: The day length determines when they will bloom. They need long nights and short days in order to blossom. Provide about 14 hours of continual darkness in every 24-hour period, starting eight weeks before you want them to bloom. The plant can be covered to provide the needed amount of darkness. Filtered or Indirect Light; Evenly Moist.

**Chenile** - Chenile grows best in soils that are moist as the plant is developing, and moderately moist during the growing season. Fertilize once per week during the growing season with ½ strength liquid fertilizer. Chenile plant grows best in temperatures from 60 to 90 degrees.

**Fuchsia** - During blooming time (Late Winter through Summer) keep evenly moist and keep out of direct light; fertilize every 2 weeks. During winter, allow plant to rest in a cool room and quit fertilizing. During this time allow the soil to dry out before watering. Around late February, new shoots will appear, cut the stems back to encourage branching and begin to water evenly.

**Gardenia, Fragrant Trailing** - Gardenias prefer an acidic soil. Being winter bloomers they will only flower under cool conditions, so keep the day temperatures around 70-75 degrees, and the night temperatures 10 degrees less. Fertilize monthly from January to September. They do best in very humid conditions; mist daily.

**Geranium, Mosquito Shoo** - Prefer bright sunlight and circulating air. Water heavily, then allow to nearly dry out before watering again. Move indoors during winter in cold areas. Repels mosquitoes for up to 10'.

**Ghost Plant** (succulent) - In their natural habitat, succulents receive water infrequently. Plant should be watered thoroughly and then allowed to dry out, before watering again. During cooler months, watering should only be done to prevent the plant from shriveling. Once established, fertilize plants lightly in the spring. Bright Light to Full Sun.

**Hawaiian Wedding Plant** - Keep evenly moist during its active growing cycle, sparingly during the rest period. Needs a constant room temperature and will bloom in 8 weeks. Bright indirect sunlight.

**Indoor Juniper** - Prefers well-drained, acidic soil. To thrive this plant must go through a winter dormancy period. To do so, keep it in an enclosed breezeway that remains cool but above freezing. It should still receive sun during this dormant period. Bright Light to Full Sun.

**Lemon, Dwarf** - Produces full size Lemons (usually only 1-2 at a time) within 12 months. Requires at least 4 hours of direct sunlight per day for best results. Likes moist, but not wet soil.

**Lime, Dwarf** - Produces full size fruit within 12 months. Requires at least 4 hours of direct sunlight per day. Likes moist, but not wet soil.

**Mandevilla** - These tropical vines grow and flower best in moist organic soil. The plants like warmth, but do not like to dry out. They also require some afternoon shade. Fertilize 2 times per week during the summer with high phosphorus fertilizer. Avoid high nitrogen fertilizer. Mandevillas do require some support like a trellis. Move potted plants indoors before temperatures go below 50 degrees in the fall.

**Medusa Ornamental Pepper** - Plant should be kept evenly moist; not over watered or over dry (leaves will drop if too wet or too dry). Fertilize when plant is actively growing or flowering. Repot in winter or early spring as needed. Bright Light to Full Sun.

**Money Tree** - Used in the practice of feng shui to harmonize the five elements within a space, and improve the flow of "chi." Also known as Malabar chestnut, Guiana chestnut, provision tree or saba nut this Central and South American Native adapts well to different conditions but prefers a tropical environment of moist, frost-free soil and plenty of sunlight. Avoid direct sunlight during the summer months however as leaves may get sunburned. Cultivated for its edible nuts which are said to taste like peanuts.

**Mystifying Prayer Plant** - Soil should be moist at all times except winter, when the soil should be allowed to dry out some. Fertilize every two months from spring to fall. Filtered or Indirect Light.

**Orange, Dwarf** - Will produce fruit within 12 months; typically 4-6 fruit. Older plants will produce more fruit. Requires at least 4 hours of direct sunlight per day for best results. Likes moist, but not wet soil.

**Passion Flower** - Keep potting mix moist, keep in a warm room, and fertilize every 2 weeks when actively growing. Requires moist air; a humidifier can be used for best results. During winter, keep at 50° and water sparingly. Bright Light to Full Sun.

**Pomegranate** - These woody plants grow best in a loamy soil with good drainage. They generally have low to moderate water requirements. They have a bushy habit and produce lots of suckers that can be pruned off so that they do not form new trunks. Or grow as a hedge outdoors. Fruit should be picked when they are heavy and have mature color.

**Powder Puff Tree** - Use regular potting soil. Needs 4+ hours of direct sunlight from southern window. Flowers in winter. Let plant approach dryness before watering, then water thoroughly and discard drainage. Fertilize only during late spring and summer. Requires moist air. Can be kept to desired height and shape with light pruning.

**Shamrock** - Prefers well drained, moist, organic acidic to neutral soil. Plant in full sun to part shade. Grows 3-6" tall. Plant bulbs 1" deep and 3-6" apart. Hardy in zones 7-10 if planted outdoors. Great as a container/ houseplant.

**Starfish Flowers** - Look exotic but are easy to grow. Huge, star-shaped flowers remind you of a cactus although it has no thorns.

**String of Pearls** - Use regular potting soil and bright, indirect light if indoors. Fertilize lightly with a low-nitrogen fertilizer in spring and summer, fertilize more lightly through fall and winter.

**Sweet Leaf Plant, Stevia rebaudiana** - Full sun to light shade in almost any soil; needs good drainage. Leaves can be eaten fresh or dried. Sold in health stores as a sugar alternative.

**Tangerine, Dwarf** - Will produce fruit within 12 months; ripens in winter. Requires at least 4 hours of direct sunlight per day for best results. Likes moist, but not wet soil.

**Voodoo Bulbs Arum cornutum** - Bright indirect light to shade is best with rich soil. Keep soil moist but not wet. Bring indoors in winter in north, hardy in zones 6-10.

## Potted Items

There are some items that we send out in pots including houseplants and tender perennials. Plants that arrive in pots are NOT dormant. Due to the tenderness of these plants we do not begin shipping them until April because of the cold temperatures they may encounter during transit.

When potted items arrive at your home, they may look wilted or have lost leaves; this is okay! Immediately remove them from the packaging and plant as soon as possible.

If the plants arrive too early and it is too cold to plant them, they can be placed inside in a sunny window and watered. Do not allow them to dry out. Once there is no longer a chance of frost, you may plant them outside.

## House and Container Plants

### CARE INSTRUCTIONS

- **Upon receipt**, immediately remove your plants from the packaging. Transit can cause some stress on the plants. They could appear dry and/or wilted. Place them in a moderately sunny window and water them well; they should perk back up within a few days, but they should be given 6 weeks to come completely out of the shipping shock.
- **Cleaning your plants**, once every month or two, will remove dust that prevents them from breathing properly. Use a damp cloth or gentle mist. Most other methods will only block up the pores on the leaf surface.
- **Fertilizing** must be done with care. Although you may be tempted to fertilize your new plants – DON'T. The plants should be established prior to beginning a feeding program. Never apply dry fertilizer unless the soil is moist.
- **Watering** kills plants more than anything else, be it under watering or over watering. Do not use cold water. They should be watered from the top to prevent buildup of salts at the surface. Do not use water that has passed through a water softener.
- **Insects** If plants have aphids or mites, a gentle wash will usually remove them from the plant. If the problem persists, use a general-purpose insecticide (cautiously and sparingly).

**Aloe, Dwarf** - This dwarf grows only 18-20" tall and is ideal for containers or rock gardens. This easy to care for plant is perfect for hot, dry locations. It has non-rigid spines along the edges of the leaves.

**Angel Trumpets** - Full Sun preferred, will tolerate part sun. Deer resistant. Water well when hot. Can be stored indoors during winter in colder areas, or seed pods collected for sowing next year. *Datura* grow 6-8'. *Brugmansia* grow 3-5'.

**Banana, Dwarf Musa** - Keep very moist at all times, but do not allow to stand in water. Lots of humidity required; for best results use a humidifier. Very sensitive to cool temperatures; ideal temperature at night is 65-70° and 75-80° during the day. Should be fertilized all year, but more heavily during the summer. Do NOT prune. Bright Light to Full Sun. Plant can be grown outdoors during summer.

**Bird of Paradise** - Typically this plant will not flower until it is about 3 or 4 years old (we send 2 year old plants) and has 8 to 10 mature leaves. They bloom September to May. Fertilize once a month. Filtered or Indirect Light; Evenly Moist.

**Blueberry, 'Top Hat'** - Miniature bush plants grow only 2' tall and about 12" in diameter. Berries are medium large, bright blue, firm, with good flavor. Perfect for growing in a pot on the patio or indoors in a sunny window. Prefers acidic soil. Bright Light to Full Sun.

**Bougainvillea** - Can bloom year round, continuously, in ideal conditions; expect slower growth during fall and early winter. Can be trained to any size and several shapes -- from small and bushy to a large, trellised display. A little pruning in spring will promote new growth and flowering. Bright to Filtered Light. Constant moisture in summer and somewhat dry in winter.

## Bulbs

Bulbs that you plant in the fall spend the winter creating a strong root system and come up in early spring. Amend soil with organic material and plant bulbs according to the chart below in loose soil. To eliminate air spaces make sure and firm soil as you plant. Mulch in colder climates. Measurements in the chart are from the soil surface to the bulb top.

Summer flowering bulbs like the warm weather. Set out after the danger of frost is past and soil has warmed. To get an early start, you may plant Cannas, Tuberous Begonias and Dahlias in flats indoors. Plant Glads at 10 day intervals throughout growing season and allow 70 to 90 days to mature. Mix peat moss or compost with your soil to improve drainage and keep bulbs from rotting. Adding bone meal will help boost root development. Fertilize with a balanced fertilizer at the rate of 1 lb. per 100 square feet monthly after planting and until foliage yellows. This will help replenish nutrients in the bulb for next year's flowers. With the exception of lilies, spring planted bulbs are tender and must be dug and stored in cold climates. After the first frost, dig, clean, dry and store for the winter in damp peat moss and sand or vermiculite. Store them at 50° and DO NOT ALLOW TO FREEZE.

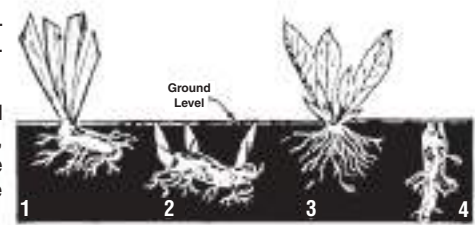
BULBS AND TUBERS				
Description	Light	Depth	Spacing	Height
Allium	Sun	4"	3"	15"
Alocasia/Colocasia	Pt to Full Shade	1-3"	18-36"	30-36"
Anemone/Windflower	Sun/Pt Shade	2-4"	6-12"	varies
Arum, Dragon	Pt. Shade	6"	4-6"	36"
Begonia	Shade/Pt Shade	1"	12"	12"
Caladium	Shade/Pt Shade	3-4"	12"	12-18"
Calla Lily	Pt Shade	3"	12-18"	12-18"
Canna	Sun/Pt Sun	2"	15-20"	3-8'
Coral Drops	Sun/Pt Shade	1"	3-6"	18-24"
Crocsmia	Sun/Pt. Sun	3-5"	12-18"	24-26"
Crocus	Sun/Pt Shade	3-5"	2-3"	6-8"
Cyclamen, Hardy	Light Shade	1-2"	6-8"	6-10"
Daffodil/Narcissus	Sun/Pt Shade	5"	4-6"	1-2'
Daffodil, Mini	Sun/Pt Shade	2"	2-6"	8-12"
Dahlia	Sun	3-4"	12-24"	varies
Dutch Iris	Sun	6"	6"	1-2'
Elephant Ears	Sun/Pt Shade	6"	3-5'	5-6'
Freesias	Sun to Lt Shade	2"	3-6"	8-16"
Gladiolus	Sun/Light Shade	4-6"	4-5"	2-4'
Gladiolus, Hardy	Sun	4"	4-6"	1-2'
Ixia	Sun/Pt Shade	4-5"	3-4"	16-18"
Liatrix, Blazing Stars	Sun/Pt Shade	2-4"	12-15"	18-24"
Lily	Sun/Pt Shade	3-5"	6-12"	varies
Lily, Pineapple	Sun	6"	1-3'	24-30"
Lily, Pink Spider	Sun	0-2"	2-3"	24-28"
Lily, Trumpet	Sun/Pt Shade	4-6"	1-2'	4-5'
Mexican Shell Flower	Sun	3"	12"	2'
Oxalis	Sun/Pt Shade	2"	4-6"	3-6"
Peacock Orchid/Exotica	Sun	2"	12"	3'
Ranunculus	Sun/Shade	2"	6-8"	12-16"
Shamrock, Flowering	Sun/Pt Shade	1-2"	3-4"	10-12"
Sparaxis	Sun	4"	4"	14-16"
Tuberose, "The Pearl" Double	Sun	3"	12"	24-36"
Tulip	Sun/Pt Shade	4-6"	6"	8-30"
Wand Flower, Yellow Emperor	Sun	3"	3"	18"

## Perennials

A perennial is a plant that will come back year after year if undamaged. Most of the perennials we ship arrive bare root. Some are shipped in small pots (see potted items for more information). Perennials typically will not flower the first year as they are establishing their root systems and foliage to support blooms the next season.

The following chart gives tips as to light, spacing, planting methods and other hints. In general, perennials require deep, well-drained garden soil that retains moisture. The planting holes should be wide and deep enough for the roots to have room to be spread out. After setting, the plants should be thoroughly watered and lightly mulched. Mulch heavily in the fall to prevent frost damage to fall-planted perennials.

Fertilize regularly throughout the growing season. Begin cultivation early and continue all season. Remove faded blooms to prolong flowering.



Perennials give beauty year-after-year.

When plants make a rapid growth they should be divided every few years to rejuvenate the plant. If they are not, the clumps become too large and the inside roots will be starved and crowded. This can cause the blooms to be small. Divide perennials in either fall or spring.

Ground covers are a unique variety of low-growing perennial. Often used in areas difficult to mow or cover with grass, ground covers require special planting. Plant ground covers such as Crownvetch with the crown 2-3' apart with roots pointing straight down and tops above the soil. If the tops of the plants are indistinguishable, plant crowns on the side and cover with 1-2" of soil. Water well until established and mulch to retain moisture and reduce weeds. Don't be surprised if the plants don't fill in the first year. They need to become established and develop strong root systems before forming a solid mat of ferny growth the second year.

### Planting Methods

- Plants such as Iris should be planted with the roots below the surface of the ground and the rhizome just on the surface.
- Plants such as Peonies should be planted with the tips of the buds just below the surface of the ground (about 1").
- Plants with a distinct crown should be set with the crown even with the soil surface.
- Plants with a fleshy root such as Hollyhocks, should be planted with the tap root straight down and the bud just below the surface of the soil about 1". If you can't determine which end is up, lay the root on its side.
- Planting depth for bulbs should be 3 times their width. 2 cm wide = 6 cm deep

Description	Attributes	Height	Planting Method	Spacing
Abyssinian, Red	☀️☀️	6-10'	3	6-10'
Agave, Artichoke	☀️🌿	18"	3	18"
Ajuga	☀️☁️🌿🌿	3-4"	3	6"
Alstroemeria	☀️☀️	24-32"	3	6"
Arkansas Amsonia	☀️☀️🌿	3'	3	3'
Astilbe	☀️☁️🌿🌿🌿	18-24"	3	12"
Astrantia	☀️☁️🌿🌿	18"	3	18-24"
Bamboo, Hardy	☀️	23'	3	6"
Bear's Breeches	☀️🌿🌿🌿	36-48"	3	36"
Black-Eyed Susan	☀️☀️🌿🌿🌿🌿	2-3'	3	18-24"
Bleeding Heart	☀️☁️🌿🌿🌿	2-3'	4	2'
Bleeding Heart, Fernleaf	☀️☁️🌿🌿🌿	10-18"	3	12-18"
Blue Stem, Indian Warrior Big	☀️	5-6'	3	18-24"
Brunnera, Jack Frost	☁️🌿	12-15"	3	12-15"
Butterfly Bush	☀️☀️🌿🌿🌿🌿	4-8'	3	4-6'
Butterfly Plant	☀️☀️🌿🌿🌿🌿	varies	4	2'
Campanula, Emerald	☀️	18-20"	3	20"
Campanula Superba	☀️☀️🌿	20-24"	3	24"
Candytuft	☀️☀️🌿🌿🌿🌿	6-8"	3	6"
Cardinal Flower, Red	☀️☀️🌿🌿🌿	2-3'	3	12"
Carnations	☀️🌿🌿🌿🌿	15-20"	3	12-20"
Catmint	☀️🌿🌿	18-24"	3	12"
Columbine	☀️☀️🌿🌿🌿🌿	12-30"	3	10-24"
Coneflower	☀️☀️🌿🌿🌿	24-36"	3	18-24"
Coreopsis	☀️☀️🌿🌿🌿	8-36"	3	8-24"
Corydalis, Blue Heron	☀️☁️	12"	3	12"
Corydalis, Blue Line	☀️☁️	2'	3	24"
Corydalis, Golden	☀️🌿	12-16"	3	12"
Creepers, Virginia	☀️☀️☁️	50'	3	18"
Crownvetch	☀️☀️	2-4"	3	12-18"
Cupid's Arrow	☀️	30-36"	3	24"
Daisy, Aspen	☀️☀️🌿🌿	20-24"	3	18-24"

Perennials				
Description	Attributes	Height	Planting Method	Spacing
Daisy, English		6-8"	3	18"
Daisy, Painted		20-26"	3	14-18"
Daphne		2-3'	3	2-3'
Delphinium		4-5'	3	24"
Delphinium, Blue Butterfly		12-14"	3	6"
Dianthus		6-12"	3	8-12"
Dianthus, Ghost		12"	3	12"
Dragonhead, Vivid		24-36"	3	24"
Echium, Red Feathers		15"	3	18"
Edelweiss		6-12"	1	6-9"
Euphorbia		10-12"	3	18"
Ferns		2-5'	3	2-3'
Fern, Tasmanian Tree		20'	3	20'
Festuca, Blue		6-12"	3	6-12"
Fuchsia, Hardy		up to 6'	3	2-3'
Gaillardia, Arizona Sun		12-16"	3	10"
Gaillardia, Dwarf		8-12"	3	10-12"
Gardenia, Summer Snow		4-5'	1	4-5'
Geranium, Hardy		20"	3	12-18"
Globeflower, Dbl. Golden Kerria		4-6'	3	4-6'
Goatsbeard		3-4'	3	2-3'
Grass, Flame		3-4'	3	3-4'
Grass, Fountain		2'	3	1-2'
Grass, Northern Lights		16"	1	12-15"
Grass, Pampas White/Pink		3' grass 6-10' plumes	3	2-5'
Grass, Pink Muhly		36"	3	36"
Grass, Ruby		6-12"	3	12"
Gunnera, Great		9'	2	12'
Hen & Chickens		2-6"	3	6-12"
Hibiscus		3-8'	4	2-5'
Holly, Alpine Sea		24"	3	20"
Hollyhock		5-7'	3	12-18"
Hopflower, Kent Beauty		10-12"	3	12-15"
Houttuynia		6-9"	3	12"
Ice Plant		2-4"	3	12-30"
Irish Moss		2-4"	3	12"
Ivy		6" grndcvr 40' vine	3	12"
Jenny, Petite		14-16"	3	18"
Juniper, Blue Rug		4-6"	3	3'
Knautia, Thunder & Lightning		12-15"	1	18"
Kniphofia		2'	3	18-24"
Lamb's Ear, Pink Cotton		8-10"	3	12-15"
Lavender		14-24"	3	14-18"
Lemon Fluff		36"	1	24"
Lenten Rose		12-18"	3	15-20"
Lewisia		6-10"	3	6-12"
Lily of the Valley		8-10"	3	6-8"
Lily, Torch		24"	3	12-18"
Lobelia, Starship Rose		20-24"	3	18"
Lupine, Russell		2-4'	3	18-24"
Meadow Rue		36"	3	2'
Mediterranean Pinks		4-6"	3	6-12"
Miscanthus, Huron Sunrise		5-6'	3	3-4'
Monarda		18-48"	3	18-24"
Moor Grass, Skyracer		6'	3	3'

Perennials				
Description	Attributes	Height	Planting Method	Spacing
Mums		3-6"	3	6-12"
Penstemon, Carillo Purple		12"	3	12"
Peony		2-4'	2	2-3'
Periwinkle (Vinca)		4-5"	3	6-12"
Phlox, Creeping		12-24"	3	18-24"
Pincushion Flower		12-14"	3	10-12"
Plumbago, Peacock		6-8"	3	12"
Poker, Orange Creamsicle		24"	3	18"
Potentilla		24"	3	12-18"
Primrose, Giant		1-2'	3	6-12"
Primrose, Poker		12-24"	3	6-12"
Prunella		7-12"	3	6-10"
Pulmonaria, Raspberry Splash		12"	3	24"
Rudbeckia		24-36"	3	12-18"
St. John's Wort, Flowering		12"	3	18-24"
Sage, Licorice		30-40"	3	24"
Salvia		3-4'	3	12-24"
Sedum		3-6"	3	12-18"
Snow in Summer		4-6"	3	12-15"
Snow-On-The-Mountain		8-10"	3	12-18"
Spreading Evergreen		5-10"	3	4'
Sundrops, Golden (Heliopsis)		3-4'	3	12-24"
Sunflower		2-12'	3	6-36"
Sweet Pea		4-8'	3	4'
Sweet William		6-9"	3	3-12"
Trefoil, Red		18"	3	12-18"
Trinity Plant (Tradescantia)		12-18"	3	12-15"
Verbascum, Honey Dijon		18"	3	12-18"
Viola, Etain		6-8"	3	6-8"
Viola, Rebecca		8-10"	3	12"
Walk on Me Plant		3"	3	6-12"
Wintergreen, Creeping		6"	3	2-3'
Yucca, Adam's Needle		3-6'	3	3'

**DAYLILIES** - Daylilies are fibrous-rooted, hardy, herbaceous perennials. Their roots look like fingers, varying in size from tiny and threadlike to large, rounded and fleshy. There is a crown at the junction where the leaves and roots join. The leaves grow in the shape of a fan. Plant in full sun. Can tolerate some shade, but need at least 6 hours of sunlight per day. Soak 4-6 hours before planting. Work soil into a loose condition about 1' deep. Mix well-rotted manure or compost, good garden soil, and peat moss. Make a mound in the center of the hole and set your daylily with the roots spread on each side of the mound. You should NOT plant the crown more than 1" below the surface of the soil. Firmly work the soil around and between the roots and water well. Make sure there are no air pockets. Plant 18-24" apart. Water well during heat and don't cut back foliage until beginning of spring after danger of frost.

**HOSTAS** - Are extremely adaptable and very resistant to diseases and insects. Use Hostas as a groundcover or border in partial to full shade. Can be planted in any good garden soil, but will perform at its best in a rich moist loam. Foliage and flower spikes are excellent for bouquets. Protect from deer, slugs and snails. Hostas are fragrant, attract hummingbirds, and are drought tolerant. Grow 1½-3' tall.

**IRIS** - Plant in full or partial sun in well drained soil. Work well-rotted manure or compost 1' deep. Apply bonemeal or lime into the top of the soil along with high phosphorus-type fertilizer. Plant rhizomes flat with the roots spreading out and slightly downward just below the ground level. Cover the rhizome base halfway up leaving the top part of the rhizome exposed to the sun. Water irises gently, but well. Space 6-8" apart, pointing the growing tips away from other if clump effect desired. Add 2-3" mulch layer in fall. Remove mulch in spring and fertilize with balance fertilizer. Fertilize in August with high phosphorus fertilizer. After flowering, remove flower stems. After the first frost, cut the foliage off leaving 4-6". Divide and replant iris every 3-5 years to prevent overcrowding.

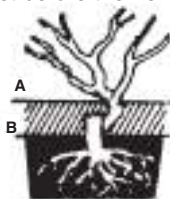
**POPPY** - Poppies grow from a stout tap root that allows them to store water for dry periods. Plant in sunny location in well-drained soil. In the south, they will grow and bloom in part shade. Work well-rotted manure or aged compost into the poppy bed. Apply bonemeal or lime in the top of the soil along with a high phosphorus-type fertilizer. Dig a hole deep enough to accommodate the poppy's taproot, keeping the crown 1-2" below the soil surface. Fill the hole with soil and tap firmly to get out air pockets. Water gently, but thoroughly. Mulch the first winter to prevent soil from heaving. Height: 2-3', Spread: 2', Space: 15-20" apart. Make excellent bouquets if you see the bottom 2-3".

## Roses

Roses should be planted immediately upon arrival in a sunny, well-drained spot. If this is not possible, they should be heeled in until they can be planted. The roots should stay covered until they are ready to be placed in the soil and soaked in water for several hours before planting. Broken, dried or decayed roots should be trimmed off prior to planting. The hole should be large enough so the roots are not crowded; depending on the size of the root system, 15" wide and 12" deep is about average. Do not place the plant so deep that any branches are covered. The roots should be spread out around the hole and the soil sifted around them. Water should be added to help settle the soil as it is being filled in. Once completely covered, more water should be added. Mound up the soil around the plant 5-6" to prevent tops from drying out. Prune tops.

Hybrid Tea Roses should be planted 18-21" apart; Hybrid Shrub Hedge Roses and Rose Trees 21-24" apart; and Climbers 6-8' apart. Fertilize after pruning in early spring (just before the new growth begins) and just before plants bloom. Additional feedings should be given throughout the season according to product directions. Roses should not be fed after August in cold climates. In future years, prune 1/3 to 1/2 of previous year's growth, remove all suckers as they appear and damaged branches. Remove faded blooms to promote additional flowering.

A. Planting Line – Severe Climate, joint or bud union up to 2" below the ground  
B. Planting Line – Mild Climate, joint or bud union 1 inch above the ground



## Vegetables

### ARTICHOKES

Artichokes are tolerant of many soil types as long as nitrogen levels are average, range from mostly sand to mostly clay and from dry to moist with pH 4.5 to 8.5. Plant in Spring or Fall. Dig trenches 8" deep and line with 1" compost or rotted manure. Plant roots 5-6" deep, 18" apart and in rows 3-4' apart, 4-6 weeks before the last frost date. Mulch or mound soil when plants reach 6" to provide support. When 8" cut away all but 6 suckers and plant to make new row at least 4' apart. You may prefer to stake plants. In late summer, cut stalks back to 5', removing any flowers. Once leaves start to yellow and shrivel, cut back close to the ground. Tubers are ready for digging after the tops are killed by frost. Dig like potatoes or leave in the ground and harvest throughout the winter. Freezing won't hurt the tubers, and a heavy straw mulch will make digging easier. Tubers will last up to 20 weeks in the ground.

### ASPARAGUS

Soil should be well-drained and asparagus can tolerate poor, salty, or alkaline soil. In bottom of trenches mound 6" of loose, humus-rich soil that is well composed and thoroughly wet followed by 6" of rich topsoil. **SEED:** Soak 24 hours in lukewarm water before planting. Sow 1-2" deep, in rows 16" apart, as early in spring as possible. Thin plants to 2" and give frequent cultivation. Transplant to permanent bed the following spring, 18" apart in rows 4' apart. Roots should be well spread apart and crown of plant covered with 4" of earth.

**ROOTS:** Plant in spring or fall. Create an 18" trench filled with the soil described above. Spread roots over this mounded soil and cover the crown of the roots with 2" of soil. Make sure the roots are placed 4" below the ground surface to allow room for them to grow and have more soil added. Rake more soil in after new shoots are a few inches high. In planting in the fall, fill the trench in completely to protect for winter. Fertilize with 3-5 lbs. per 100 square feet of fertilizer or manure each spring. Apply and work into soil before growth starts. Repeat again after harvest is complete for the year. Cut the tops back and mulch in late fall to help prevent deep freezing and soil temperature changes. Don't cut stalks until the third year and then only lightly. When the bed is mature, (after third year), cut all stalks regularly for 6-8 weeks only, or until around the end of June in the North. Then stop cutting completely to

allow bed to develop for next year. When harvesting, snap off or cut shoots at ground level to avoid injuring new growth.

### ELEPHANT GARLIC

Plant cloves 12" apart and cover with 2" of soil. If planted in the fall, cloves will produce huge bulbs (4-5") which can be divided into individual large cloves the following fall. Protect in winter in cold areas with mulch. If planted in the spring, it will usually take 2 growing seasons to produce the huge bulbs. However, warm climates may produce the large bulbs the first year.

### GARLIC

At planting time use a low-nitrogen (5-10-10) fertilizer and again when the tops are 6" high; too much nitrogen causes foliage growth but few and smaller new bulbs. Separate cloves and plant them 4-6" apart, 2-3" deep and in rows 1 1/2' apart. If you are leaving the garlic in for a second year to develop the large size cloves, plant 6-8" apart and 4-6" deep. In the coldest climates, plant in the spring; in all other areas, plant in the fall. Plant in rich, loose, sandy and well-drained soil. Garlic will not do well in boggy and overly clayey ground. When the tops turn yellow and fall over, 90 or more days after the cloves are planted, dig the bulbs from the ground carefully, allow them to dry in the sun for a few days, then braid the tops into strings or tie in bunches and hang in a cool, dry place. In the spring, water and fertilize well, but decrease watering as harvesting time nears, to cut down on mold growth. Cut off woody seed stems at the top leaf to redirect energy to the bulb.

### HORSERADISH

Horseradish is usually grown from piece roots. They can be planted horizontally and covered with 2" of soil. Space 8-9" between roots and 15" between rows. Prepare soil with humus and fertilizer, as horseradish prefers rich loam with organic matter. Harvest in late fall during the 2nd year after planting.

### ONIONS

Plant sets as soon as the ground can be worked in early spring. Soil should be fertile, deep and well-drained. Onions are heavy feeders so prepare soil by working well rotted manure and fertilizer into the soil before planting. One pound manure per square foot and 4-5 lbs. of 5-10-10 fertilizer per 100 square feet. A steady moisture supply is essential, particularly during bulb formation. Start seed 12 weeks before outdoor planting date, 1/2" deep.

When setting out transplants or sets, space 2-3" apart in rows 1-2' apart, 1-2" deep. Fertilize again mid-season. Onions are frost hardy and can be planted 4 weeks prior to your last average frost date. Southerners can plant onions in the fall or winter. When sowing seeds directly into the garden, do so as early as possible, as soon as the ground can be worked. Harvest when half of the tops have broken over naturally. When the tops have fully wilted, cut them off 1 1/2" above the bulb. Leave onions in the garden to cure for a few days until roots are brittle. Prepare for storage by drying in an open crate or mesh bag for 2 weeks or more. Clean by removing dirt and loose, dry outer skins. Store where the air is dry and between 35-50°F. Onions with thick necks should be used first as they are more likely to spoil.

### POTATOES

Potatoes grow best in rich, loose, sandy, fast draining, slightly acidic soil. Prepare with plenty of organic matter and add 5-10-10 low nitrogen fertilizer; pH range of 4.8 to 5.4. They can be grown in higher pH but then there is the chance for scab (brown corky tissue on the potato surface); add lime only if pH is below 4.8. If soil

is heavy or waterlogged, potatoes may become deformed or rot. Plant where potatoes haven't been planted for a few years. Plant sets 4-5" deep and 12-15" apart in rows 2' apart. Do not cultivate too deeply as tubers form close to the surface but do keep weeded. It may be necessary to mound 2-3" of soil, mulch or straw over the row as they grow to keep the sun from turning the growing tubers green. Dig when tubers are large enough, usually 7-8 weeks after planting. Remove larger tubers but not the entire plant allowing the smaller tubers to continue growing. When plant tops begin to dry out, harvest for winter storage. Leave tubers in the garden for a day to cure the skins and then store in a cool, dark, airy place.

### SHALLOTS

Space 3-5" apart in the row in fur-rows 1-1 1/2" deep. If used as dry bulbs, the shallots should be lifted when the leaves have turned brown and left out on the ground for a few days to dry. Remove dead leaves and soil before storing in a cool, dry place. Small bulblets can be stored and used for planting stock the following spring. Bulbs may be used for pickling.

## Vines

**Vines should be planted a minimum of 1' from any structure for adequate air circulation. Cut back and stake securely. Firm soil around roots and fertilize after new growth begins. Vines need plenty of water and well-drained soil.**

### BITTERSWEET

Does well in any soil and may be best to place in poor soil so it does not over-grow as it can be invasive. Dry to moist water requirements and part shade to full sun. Plant not more than 20' apart, but two planted in same hole will cross-pollinate and bear a greater abundance of berries. Vigorous, twining, fast growing. Berries used for dried flower arrangements; useful for covering a waste space, rubble, or fence.

### CLEMATIS

Plant Clematis 3-4' apart in light loamy, well-drained soil in full sun. Add peat moss for best results. Give vines lots of sunlight, shade roots with small plantings and/or mulch. Clematis vines must have their roots cool. Keep soil moist but not wet. Pruning depends on when the plant flowers. Early flowering types bloom on last years wood so prune AFTER spring flowering and only to remove dead or diseased parts and to control shape (Nellie Moser, Will Goodwin, our varieties of Orchid/Red, Pink, White and Blue Light). Later flowering varieties flower on current years growth and benefit from severe pruning (down to 12-18" from ground) in the winter or spring before new growth begins (Ernest Markham, Jackmanii, our varieties of Purple and Red).

### HONEYSUCKLE, HALL'S

Tolerates any soil type and part shade but prefers full sun. Sturdy support is required. Plant 3' apart. So fragrant it will attract many bees, butterflies and hummingbirds. Prune in spring to remove dead or broken vines.

### HOPS VINE

Plant root cuttings on their side in a 6" trench, covering them with 2 inches of soil, in full sun. Gradually fill in the trench as the vine grows. Must keep well watered. Can grow to 25' in one season. May be trained to any support; hardy variety to zone 3; grown as an ornamental in the south; does not produce hops in zones 8-10. Need at least 20 days of below 32° for dormancy period.

### HUMMINGBIRD TRUMPET VINE

Best in full sun but will tolerate part shade in any well-drained, even poor soil. Place 6-8" deep, as close as 2-3' apart. Needs sturdy support. Can grow to 20' or more. Blooms from July to November with trumpet shaped flowers, 2-3" long, in

clusters of 4 to 12. Vigorous grower, attract hummingbirds. Cut back in the fall to 2' to keep it from over growth and to promote flowering; effective fast cover; use super phosphate to promote blooming. Tolerant of deer, drought, heat, humidity, rabbits and wind. Deciduous.

### HYDRANGEA, CLIMBING

Plant in rich, well drained, normal to moist soil. Tolerates some sun but thrives in dense shade in summer. May grow to 60-80'. Recommended for northwest walls or places where shade is dense. Fragrant. Deciduous.

### IVY, SUB-ZERO

Tolerates smoky conditions; will not hurt masonry. Spreading. Should never be allowed to grow up the trunks of trees or to climb on wood. Can choke out trees and shrubs. Can be used as ground cover or climbing vine.

### PASSION FLOWER VINE

This native vine produces gorgeous fragrant flowers from mid to late summer on 6-8' vines. The flowers turn into edible fruit. Can be planted on a trellis, a fence or as a companion with a shrub. Grows in full sun to light shade. The vine will die back in colder areas and be woody in warm areas.

### SILVER LACE VINE

Tolerates most well drained garden soils with full sun to part shade. This twining vine needs good support and can reach 10-15'. Small, fragrant flowers bloom in late summer and are borne abundantly on slender panicles. Plant 3-5' apart in zones 4-10. Valued as a quick cover, particularly where other vines won't grow. Prune in spring. Deciduous.

### VIRGINIA CREEPER

Tolerates almost any soil type in full sun to heavy shade. May grow 10' in a single year; indeterminate height and spread. No flower bloom but leaves are a glossy green in summer and turn brilliant scarlet in fall. Strong vine which quickly covers walls, fences, and trellises.

### WISTERIA

Rich loam, organic, slightly acidic soil is best in full sun. Blooms 2-4 years after planting in May-June, in clusters 6-12" long. Very fragrant. Needs sturdy support; trellis, wall, fence, etc. Prune aggressive growth during summer. Regular spring pruning promotes flower formation. Resistant to deer, drought, heat, humidity, pollution, rabbits, seashore, slope and wind. All parts of the plant are **poisonous**, especially the seeds, keep animals and children from ingesting any plant material. Deciduous.